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Social network sites as area for students' pro- environmental activities

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Abstract

Apart from school education, students' value orientation and behavior is also affected by informal and non-formal education. Therefore, if we examine the effects of informal and non-formal education on the development of pro-environmental interests of students for instance, then we must include new media as learning spaces and spaces for demonstration of environmental action. In this sense social networks become indispensable as virtual spaces for demonstration of environmental interests, which can contribute to pro-environmental activities, or foresight patterns of pro-environmental behavior. The aim of this research, whose results are presented and analyzed, refers to the comparison of indicators of environmental activities of students in Split related to their involvement in the activities of green NGOs, procurement of literature on environmental issues and on demonstrating interest in environmental issues on social networks, including Facebook. This research was conducted by survey method on a representative sample of college students from six faculties at University of Split (N = 531), using a questionnaire composed and focused on their self-reported behavior. Although the number of students who are active in NGOs is limited, and very few of them purchase books pertinent to environmental issues, a much larger number of them register and demonstrate an interest in environmental issues through social networks sites. In this sense, and based on the results of this study, the importance of social aspects of learning supported by new technology is emphasized, which indicates the significance of social networks as a new channel for communication and education.

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1. Introduction

In addition to formal education and its traditional performance capabilities as well as outdoor learning and conventional media impact on education, the special attention should be drawn to the possibilities and effects of improving learning outcomes and using interactive activities of students and teachers through social networks sites communication. Apart from that social networks provide great opportunities for non-formal education as well as for engaging participants in social changes that certainly includes environmental issues.

Social network sites are primarily defined as web-based services that allow individuals to (1) construct a public or semi- public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view of traverse their list of connections and those made by others within the system, their participants are not necessarily „networking“ or looking to meet new people (Boyd & Ellison, 2008). However, it is also important to underline that SNSs are celebrated for providing channels for informal and unstructured learning and that participants are using SNSs for education or organization of some activities as well as for demonstration and meet their aspirations within selected sites according to their interests (Selwyn, 2009).

Numerous studies about use of SNSs as a new space for improving communication among students including learning outcomes show that this is new educational tools (Tiryakioglu & Erzurum, 2011), and that online social networking activities are becoming more relevant in the education context (Hamid, Chung & Kurnia, 2009), or as a space with new facilities that significantly influences the behavior of students around the world (Salek Pay, Hosseini & Shakouri, 2013). Also, SNSs have potential to become a valuable resource for supporting students' educational communication and collaboration with faculty (Roblyer et al. 2010; Griffith & Liyanage, 2008). These were the reasons for numerous SNS studies published in influential international journals from 2004 to 2013 (Tsai et al., 2013) and for increasing number of higher education instructors that began to combine distance education delivered through SNSs (Brady, Holcomb & Smith, 2010; Tiryakioglu & Erzurum, 2011). So, in the context of educational environment and tools there is estimation that social networks support students' using and improving their academic performance, inquiry, and alternative thinking skills. The literature has shown evidence of some efforts made to appropriate and repurpose technologies to support educational activities (Hamid, Chang & Kurnia, 2009) as well as use of the Internet for individuals' development (Ceyhan, 2013).

In this context the paper presents the results of research pertaining to self-reported environmental behavior of university students. Previous researches corroborated the fact of the slowest evolving of conative dimensions comparing to cognitive and emotional dimensions related to environmental awareness development among participants. Also, there is estimation that formal education programs less influence on the development of environmental awareness, and that especially designed programs for outdoor learning or for “action oriented education” produce better learning outcomes on environmental issues (Kilinç, Boyes & Stanisstreet, 2011). The focus of research interest has been to see in what kind of pro-environmental activities students usually participate, and showing keen interest for using SNSs for demonstrate their actions and interests related to environmental issues.

2. Aim and methodology

The present research aimed to compare indicators of environmental activities of students related to their involvement in the activities of NGOs, procurement of literature on environmental issues and on demonstrating interest for environment on social networks sites including Facebook.

It was conducted by survey method on a representative cluster sample of college students from six faculties at University of Split (N=531), where the cluster represents seminar groups, and by using questionnaire specifically composed and focused on their self-reported behavior. Interpretation of the results is provided by descriptive statistics. The survey was conducted during the summer semester of the 2011/12 academic year.

3. Findings

In relation to the intention of finding out what are the guidelines for pro-environmental behavior, the issue was related to self-reported environmental behavior of students – about the practice of certain activities to protect the

environment with the main question - Did you do any of the below during the last year?, which was addressed to eight selected activities[†]. Also, query has been made about students' civic (or NGOs) activism.

The results revealed that large majority of students are members of Facebook or similar SNSs, with indication that 17% of them are NGOs activists but only 0,5% are active in green or environmental oriented NGOs. .

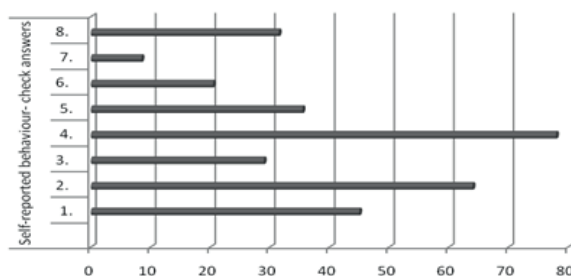


Figure 1. Did you do any of the below during the last year? (Check answers)

1) Purchased a product that is less environmentally harmful; 2) Bought foods labeled as "eco-products" or "organically produced", "pesticide-free", etc.; 3) Stopped buying certain products as not environmentally friendly; 4) Saved energy; 5) Participated in cleaning environment community actions; 6) Significantly changed the way of life in order to contribute to environmental protection; 7) Bought or borrowed publications / books on environmental issues; 8) Joined a group on Facebook or another social network that has an interest in environmental issues.

On the other side it is obvious that data about students' pro-environmental interests /actions through SNSs show their significantly participation through virtual places, that could present new educational tools and outdoor learning spaces for their environmental education and environmental awareness development.

Environmental interests and actions by joiniga group on SNSs demonstrated that 31.5% of students participated in this research and that is very close to the figure of 35.5% of those who were active on cleaning and protection of environment in community (Figure 1).

However, their activities and expression of interest for environmental issues are pervasive in much larger number of students than their practices of purchasing literature on these issues, even for students who take many courses on the environmental issues (Figure 2.). Research findings show that these students are not so interested in conventional purchasing literature sources about environment and that they are much more inclined towards sharing this interest on SNSs.

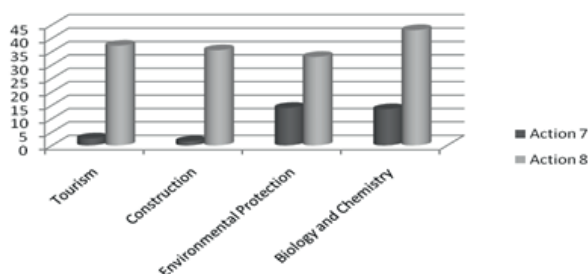


Figure 2. Students of studies with pro-environmental curricula

Action 7) Bought or borrowed publications / books on environmental issues;

Action 8) Joined a group on Facebook or another social network that has an interest in environmental issues.

Anyway, it should be noted that students reported a high level of a pro-environmental behavior concerning the actions of their purchasing products that are less environmentally harmful, buying foods labeled as "eco-products" or

[†]This questionnaire presents a slightly modified version of the one constructed by NenadKarajić and Alexander Štulhofer for field data collection within "Socio-cultural aspects of transition - Croatia 1996" project, implemented by Institute of Economics in Zagreb.

"organically produced", "pesticide-free" and saving energy in their every daily activities that could be attributed to long-time pro-environmental media campaigns and education.

4. Conclusion and discussion

This paper aims at discussing how using of SNSs as information technologies achievement affects the fulfillment of the aspirations and interests for pro-environmental actions among "digital natives" generation in higher education, who are perceived to be familiar with online social networking. This is of particular importance due to breath of application of digital technology in education and with the increase of information in a virtual spaces (Buzov & Kuić, 2011), that could improve knowledge about environmental issues and develop environmental awareness through learning supported by new information technology tools. .

It is obvious that students prefer to use social networks to meet their interests in environmental issues and it should be taken into account when we consider about tool for learning outcomes improvements. SNSs could be promoted as a space for the environmental education through action, for instance.

There is a need for further research on opportunities for using social networks in educational practices, and new studies may look at how communication through social networks could influence educational outcomes, particularly because of new educational tasks and perspectives such as education for personal and social changes, i.e. for the coveted educational process that includes transformative but also transmissive dimension.

The results of the research reported here show that students are not interested in conventional literature sources for education, lower than expected for those who studied on environmental friendly studies, and it corresponds with some other research findings which referred on such students where they did not express expected level of environmental awareness (Oğuz, Çakıcı & Kavas, 2010). These findings suggest a proposal for reconsideration of current curricula in terms of effectiveness that could be supported by perceiving Facebook and other SNSs as significant opportunities for improving educational achievement, including environmental awareness development, through the learning process supported by new technologies within the existing system of formal education.

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